IX. *A short Account by* James Parsons, *M. D. F. R. S. of a Book intituled,* Traité des Sens, *&c. by* M. le Cat, *M. D. F. R. S. printed at* Rouen, 1740. 8vo.

Read Dec. 16. 1742.

THIS Treatise appears, by the Advertisement prefixed to it, to be a Part of a Physiological Work, which the Author says is not likely to be soon published; and that he has therefore exhibited this Part for the Use of the Curious, and Lovers of Philosophy, who might not be so agreeably entertained by the rest of the Work, as treating chiefly of the Human Body, and therefore calculated rather for those of the Faculty of Medicine.

He begins the Book with Page 201. and says he has, before, established certain general Principles of *Sensation*, and that now he proceeds to recount the particular Parts with which Nature has furnished the animal Oeconomy, serving to our different Senses; and then expatiates a little upon the general Utility of them.

His First Chapter treats of the Sense of *Feeling*, wherein he has compiled all the different *Phænomena* that regard this Sense, as those of Heat, Cold, and other Objects of Feeling, with the Structure of the Skin, to which he thinks fit to subjoin Two known Histories, one of a blind Organist in *Holland*, who distinguished all kinds of Coins, and played at Cards, by Feeling; and the other of the famous Statuary *Ganibasius*, who, though stone-blind, could by

by Feeling make a Statue in Clay, perfectly like what he felt. Our Author adds ſomething of *Tickling*, and endeavours to prove, that Imagination has a great Share in the Cauſe of this Senſation, as well as the others; and thence he falls upon an Account of another Senſe, which he brings under this Head; which he calls, *la Chatouilment de l'Amour*, of which he gives a florid Definition.

Taſting is his next Subject, wherein, as in the foregoing Chapter, he has drawn together the ſeveral Sections relating to it, as, an Account of the Organs of Taſte, the Mechaniſm of *Savours*, and the manner of their being varied into compound Taſtes. His Compariſon here is new; he ſays, Since the Principles of Savours are Salts, both fixed and volatile, that Water, Earth, and Sulphur, ſerve to make the great Variety, and different Kinds, that are in Taſte, juſt as Shadows variouſly mingled with Light form different Appearances; not that the Shadow is capable of making an Impreſſion upon our Organs of Sight, but the Light alone; as the Salts alone are, upon our Organs of Taſte. He has alſo ſome Reaſoning upon the Difference that is in Mens Appetites to ſome Eatables, which were before diſagreeable. His Reaſon is, not that the Organs differ at any time from what they always were, but becauſe the Soul ſometimes changes her Ideas, even from the ſame Impreſſions, and that therefore there can be no Ideas eſſential to any Impreſſions; or at leaſt, that there are none which the Soul cannot change: He alſo ſays, that Imagination is much concerned in the Variation of Taſtes.

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The Senſe of *Smelling* is diſcuſſed in his Third Chapter, wherein he obſerves the ſame Method as in the Two former, in deſcribing the Mechaniſm of the Organs ſerving to that Senſe, and accounting for the Conveyance of Odours to thoſe Organs; and for the *Stimulus* of ſome odoriferous Particles cauſing Tears to flow, as well as Sneezing cauſed by a glaring Light; and, after making ſome Reflections on the many Effects of Smells upon the Human Body, and the exquiſite Senſe of Smelling in ſome Animals, he recites the Story told by Sir *K. Digby*, of the Boy brought up in a Foreſt, whoſe Smell was ſo exquiſite as to perceive the Approach of Enemies, and warn his Parents of them. Our Author found this Story elegantly told, and reaſoned upon, in *Monſieur Verduc's* Book called, *Uſage des Parties*. He alſo mentions the Perfection of Smelling in the Inhabitants of the *Antibes*, who can run a Man upon the Noſe like an Hound; and concludes this Section with a Relation of a *Frier* of *Prague*, from the *Journals des Scavans*, who could not only diſtinguiſh different Perſons from each other by Smelling, but alſo an incontinent Woman from a chaſte one; and adds, in a joking Strain, that this Man had begun a Treatiſe of Odours before he died, which the Journaliſts much regretted the Loſs of: But, ſays *Monſieur le Cat*, for my part, I do not know but a Perſon ſo exquiſite in this kind of Knowledge would be dangerous in Society.

He proceeds next to treat of *Hearing*, and brings under that Head the whole Mechaniſm and Doctrine of Sounds; the Vibrations of all ſounding Bodies: And from the Experiment of holding a Candle near any vibrating or ſounding Body, without the Flame's being

being moved or otherways affected, he argues, that the common Air does not produce the Sound, but a more ſubtil Fluid better proportioned to the Organs of Hearing: Here he runs into a Detail of the Principles of the Chords and Tones of Muſic, and makes a new and curious Compariſon between the principal Colours in the Rays of Light, and the foreſaid Fluid, which is more or leſs ſubtil in the Air, ſome Particles of which are only capable of being moved to expreſs low Tones, others higher, and ſo on ſucceſſively, as far as the Compaſs of Muſic reaches; juſt as the Light is compoſed of certain kinds of Rays, ſome of which produce *Red*, ſome *Green*, *&c.* This being ſuppoſed, ſays he, it may be conceived, that every Tone will move the Fluid that is proper to itſelf; and by that means the Ear may receive at once the Impreſſions of every Fluid, as the Eye receives the Impulſions of ſeveral coloured Rays at the ſame Inſtant. He adds to this, by way of Reaſoning, that when a ſingle String of an Inſtrument is touched, though the generality of Mankind can diſtinguiſh but One Tone, which he calls the *fundamental Sound*, yet People accuſtomed to Harmony can diſtinguiſh, beſides, an *Octave*, a *Fifth*, and a *Third*, covered by this *fundamental Tone*; for the *Octave* is half that Sound, or the Produce of half the String; the *Fifth* is the Produce of Two-thirds, and the *Third* is the Produce of Four-fifths of the ſame String.

He proceeds to reaſon upon this in an agreeable Manner, and concludes his above-mentioned Compariſon to this Purpoſe: Thus there are in the vibrated String all the Harmonies or Chords at once, which

which compoſe the *fundamental Sound*, by vibrating each its particular proper Fluid at the ſame time; juſt as the Aſſemblage of all the different primitive coloured Rays meeting together, makes the white Colour or Light: And ſo the Ear of a good Muſician is a kind of *Priſm*, which can ſeparate and diſtinguiſh the Sounds or Tones from each other in the *fundamental Sound*. He gives an anatomical Deſcription of the Organs of Hearing; and has added ſome good Figures of the external and internal Parts of the Ear, with the *Euſtachian* Tube, much after the manner of *Du Verney*.

He has alſo the Figure of an Inſtrument, Page 292. to help thoſe that are hard of Hearing, which he claims the Invention of. The particular *Form* of this Inſtrument may be new to the Author; yet we have had of this Kind in Uſe many Years in *England* for the ſame Purpoſe. He finiſhes this Section with ſome Reflections upon a young Man of a Town called *Chartres*, who was born deaf and dumb, and whoſe Hearing ſuddenly came to him, and who ſpoke ſome Months after. In this Place he has a very good Figure of the *Baſis Cerebri*, by a tranſverſe Section through the *Frontal Sinuſes* a little above the Eyes, and continued through the *temporal Bones*; demonſtrating the *Originations* and *Exit* of the Nerves, with the Conjunction of the *vertebral* and *carotid Arteries*, according to the Diſſection of the famous *Willis*; and then proceeds to his laſt Section, which treats of *Seeing*.

This Section, in a word, is on the Structure of the Eye, and all the *Phænomena* of Viſion. He begins it with the Doctrine of *Lights* and *Colours*, making uſe

uſe of many Experiments and Explanations of the great Sir *Iſaac Newton*; having alſo added ſeveral of his own, beſides ſome little Cavils, a mere *Jeu des Mots*, againſt that great Man's Doctrine of *Attraction*, to which he prefers the *Impulſion* of *Carteſius*. He quotes againſt Sir *Iſaac*, *M. de Fontaine*, *M. Bannier*, and *M. Voltaire*; and as our young Author had a mind to oppoſe the Opinions of one of the greateſt Abilities in the Sciences, common Prudence ſhould have informed him, that the Name *Newton* beſpeaks the greateſt Modeſty and Diffidence in the Attempt. Our Author amuſes himſelf thus againſt that *Prince* of Philoſophers, which is the more ſtrange; ſince if he had wrote nothing on the Subject, *Monſieur le Cat* would have wanted a great Part of his Furniture for this Section.

The principal Authors beſides, regarding Anatomy and Phyſiology, which our Author ſeems to have had in his View, are *Du Verney*, *Willis*, *Synac* upon *Heiſter*, and *Verduc*'s excellent Book *L'Uſage des Parties*. However, this *Treatiſe* of the Senſes is judiciouſly compiled; nor does it want ſeveral ingenious Embelliſhments from the Author, beſides the Opinions of ſeveral others; we may therefore conclude it to be a very uſeful Book.